



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/723,583

11/26/2003

Edward Krause

RGB-101

7608

20028 7590 12/23/2008  
Lipsitz & McAllister, LLC  
755 MAIN STREET  
MONROE, CT 06468

EXAMINER

O CONNOR, BRIAN T

ART UNIT

PAPER NUMBER

2419

MAIL DATE

DELIVERY MODE

12/23/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/723,583	<b>Applicant(s)</b> KRAUSE ET AL.	
	<b>Examiner</b> BRIAN T. O'CONNOR	<b>Art Unit</b> 2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 and 43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 and 43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The Examiner has withdrawn the previous Office Action based upon applicant's request for reconsideration in the Interview (November 18, 2008) and, therefore, a new grounds of rejection is made in this supplemental action.
2. Claims 1-38 and 43 are currently pending.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 24-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Monta et al. (US 7,039,048; hereafter Monta).

**With respect to claim 24**, Monta discloses a method of combining several streams (250, 252 of Figure 2) into a group of multiplexers (10, 30, 32 of Figure 2) that includes determining that there is real-time data in a subset of data in a first stream (column 13, lines 5-10; column 12, lines 60-66), classifying that data as different from a second subset of data (column 13, lines 26-38; where PID is used to classify the subset of data) and using a selected channel for transmission rather than a second channel (column 14, lines 30-38).

**With respect to claim 25**, Monta further discloses that the first and second PID (82 of Figure 2) are used to notify television receivers of updates to the data-streams (56, 24, 26 of Figure 2).

**With respect to claim 26**, Monta further discloses using PID (82 of Figure 2) and re-tuning user's receivers (column 14, lines 36-39).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-14 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meggers et al. (US 6,728,270; hereafter Meggers) in view of Heddes et al. (US 6,674,718; hereafter Heddes) and further in view of DeMoney (US 6,721,789).

**With respect to claims 1 and 43**, Meggers discloses a method and apparatus for examining an incoming packet stream (AC of Figure 4) then determining if the packets are real-time packet or not (210 of Figure 5) and finally combining the split sub-streams into a single output stream (OI of Figure 4). Packets are entered into both buffers and retrieved from the end of the buffers by an output interface (OI of Figure 4; column 12, lines 1-21). Meggers's calculates a deadline for each packet that enters the system (column 13, lines 20-34).

Meggers fails to disclose determining the capacity of an output buffer scheduled to accept a packet and selecting packets for transmission based on whether the buffer has capacity or not.

Heddes, in an invention related to processing data through several pipes, discloses examining queue levels (132, 136 of Figure 7) when moving data into pipes or buffers (7, 8, 9 of Figure 1A). Heddes further discloses that the output of the examination of the queue levels is used to assign packets to positions in the queues (212, 214, 218, 224 of Figure 10).

Heddes teaches the benefit of increased efficiency while processing data through multiple queues by examining the queues levels or capacity (column 7, lines 27-30). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Heddes with the method and apparatus of Meggers.

Meggers does not disclose a deadline taken from a pre-existing synchronization time reference extracted from a packet in the group of streams.

DeMoney discloses a deadline taken from a pre-existing synchronization time reference extracted from a packet in the group of streams (610 of Figure 6; 1104 of Figure 11; column 5, lines 63-67).

DeMoney discloses the benefit of increased flexibility by providing bandwidth management for a mix of video stream requests (column 3, line 65 – column 4, line 4). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of DeMoney with the method and apparatus of Meggers.

**With respect to claim 2**, Meggers further discloses that packet are read from the queue and transmitted based upon a delivery deadline, and the delivery deadline is converted from a timestamp for priority control (column 11, lines 59-67).

**With respect to claim 3**, Meggers further discloses that every time a packet arrives (210 of Figure 5) the processing will update timestamps and delivery deadlines (column 12, lines 27-31).

**With respect to claim 4**, Meggers further discloses that the delivery deadline is converted from a timestamp for priority control (column 11, lines 59-67).

**With respect to claim 5**, Meggers further discloses that the timestamp is related to a synchronization control packet (column 11, lines 61-65) that has control parameters N and i (column 12, lines 51-65). The control parameter N is related to a synchronisation entity (SE) of packets (column 12, lines 61-14) and the SE is viewed as equivalent to a next access unit or frame of packets.

**With respect to claim 6**, Meggers further discloses that real-time data is processed in sub-streams (column 9, lines 5-10) that are defined by admission control packets (column 10, lines 4-10). Meggers also teaches that a sub-stream of packets is also viewed as a synchronisation entity (SE) (column 7, lines 19-30).

**With respect to claim 7**, Meggers further discloses that real-time data is processed in sub-streams (column 9, lines 5-10) that are defined by admission control packets (ACPs) (column 10, lines 4-10). ACPs are sent to the network node prior to started real-time packet transmission (column 10, lines 12-23).

**With respect to claim 8**, Meggers further discloses that the timestamp is related to a synchronization control packet (column 11, lines 61-65) that has control parameters N and i (column 12, lines 51-65). The control parameter N is related to a synchronisation entity (SE) of packets (column 12, lines 61-14) and an SE is defined as consisting of video frames (column 6, lines 48-50).

**With respect to claim 9**, Meggers further discloses that the timestamp is related to a synchronization control packet (column 11, lines 61-65) that has control parameters N and i (column 12, lines 51-65). The control parameter N is related to a synchronisation entity (SE) of packets (column 12, lines 61-14) and an SE is defined as consisting of voice packets or VOIP (column 6, lines 50-55).

**With respect to claim 10**, Meggers further discloses that the packets are related to a synchronization control packet (column 11, lines 61-65) that has control parameters N and i (column 12, lines 51-65). The control parameter N is related to a synchronisation entity (SE) of packets (column 12, lines 61-14) and an SE is defined as consisting of voice packets or VOIP (column 6, lines 50-55).

**With respect to claim 11**, Meggers further discloses that sub-streams are assigned an admission control packet (ACP) (column 10, lines 4-11) and this ACP will define control parameter T for assigning a type to the sub-stream (column 9, lines 50-55).

**With respect to claim 12**, Meggers further discloses that non real-time streams are send to a second queue for FIFO processing (column 11, lines 49-52; column 12,

Art Unit: 2419

lines 32-36). FIFO processing uses order of arrival for transmitting packets and it thus represents a time spent waiting in a queue compared to other packets in the queue.

**With respect to claim 13**, Meggers further discloses that sub-streams are assigned an admission control packet (ACP) (column 10, lines 4-11) and this ACP will define control parameter T for assigning a type to the sub-stream (column 9, lines 50-55). And that the arrival of real-time sub-streams with ACPs is considered in the processing of non real-time streams send to a second FIFO queue (column 14, lines 2-14).

**With respect to claim 14**, Meggers further discloses that sub-streams are assigned an admission control packet (ACP) (column 10, lines 4-11) and this ACP will define control parameter T for assigning a type to the sub-stream (column 9, lines 50-55). The ACP will also define a control parameter D for setting a delivery deadline (column 9, lines 44-49; viewed as equivalent to a waiting time priority). And that the arrival of real-time sub-streams with ACPs is considered in the processing of non real-time streams send to a second FIFO queue (column 14, lines 2-14).

7. Claims 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monta et al. (US 7,039,048; hereafter Monta) in view of Heddes.

**With respect to claim 15**, Monta disclose a method of combining several streams (250, 252 of Figure 2) into a group of multiplexers (10, 30, 32 of Figure 2) that includes identifying a first multiplex (Figure 2) with a first amount of data (87 of Figure



Art Unit: 2419

4A) in a first channel with the amount of data exceeding a first threshold (97 of Figure 4A). Then identifying a second multiplex with a second amount of data (99 of figure 4B) in a second channel with the amount of data not exceeding a second threshold (103 of Figure 4B) and selecting a subset of the group of streams being send over the first multiplex (119 of Figure 4B).

Monta fails to disclose reassigning or transferring a subset to a different multiplex.

Heddes, in an invention related to processing data through several pipes, discloses examining queue levels (132, 136 of Figure 7) when moving data into pipes or buffers (7, 8, 9 of Figure 1A; viewed a reassigning a subset of data to a different multiplex or pipe). Heddes further disclose that the output of the examination of the queue levels is used to assign packets to positions in the queues (212, 214, 218, 224 of Figure 10).

Heddes teaches the benefit of increased efficiency while processing data through multiple queues by examining the queues levels or capacity (column 7, lines 27-30). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Heddes with the method of Monta.

**With respect to claim 16**, Monta further discloses that the first and second PID are used to notify television receivers of updates to the data-streams (82 of Figure 2).

**With respect to claim 17**, Monta fails to disclose thresholds used to control data loss.

Art Unit: 2419

Heddes, in an invention related to processing data through several pipes, discloses examining queue levels (132, 136 of Figure 7) when moving data into pipes or buffers (7, 8, 9 of Figure 1A). Heddes further disclose that the output of the examination of the queue levels is used to assign packets to positions in the queues (212, 214, 218, 224 of Figure 10). Heddes teaches the use of two thresholds a minimum level and a maximum level (42, 44 of Figure 3). Heddes method is used to control loss of bandwidth (column 7, lines 48-56; where loss of bandwidth is viewed a equivalent to loss of data).

Heddes teaches the benefit of increased efficiency while processing data through multiple queues by examining the queues levels or capacity (column 7, lines 27-30). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Heddes with the method of Monta.

**With respect to claim 18**, Monta further discloses a PID (82 of Figure 2).

Monta fails to disclose reassigning or transferring a subset to a different multiplex.

Heddes, in an invention related to processing data through several pipes, discloses examining queue levels (132, 136 of Figure 7) when moving data into pipes or buffers (7, 8, 9 of Figure 1A; viewed a reassigning a subset of data to a different multiplex or pipe). Heddes further disclose that the output of the examination of the queue levels is used to assign packets to positions in the queues (212, 214, 218, 224 of Figure 10).

Heddes teaches the benefit of increased efficiency while processing data through multiple queues by examining the queues levels or capacity (column 7, lines 27-30). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Heddes with the method of Monta.

**With respect to claim 19**, Monta further discloses that tuning of HFC carriers (column 14, lines 1-10).

**With respect to claim 20**, Monta fails to disclose prioritizing data-streams and choosing a stream with the highest priority relative to other data-streams and transmitting a data-stream according to the priority.

Heddes, in an invention related to processing data through several pipes, discloses examining creating priorities (202, 204 , 206 of Figure 9) and then assigning a priority to packets from a data-stream or buffer (216, 220, 224 of Figure 10) before transmitting the packets (234, 238, 242 of Figure 11).

Heddes teaches the benefit of increased efficiency while processing data through multiple queues by examining the queues levels or capacity (column 7, lines 27-30). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Heddes with the method of Monta.

8. Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monta in view of Heddes and further in view of Meggers.

**With respect to claim 21**, Monta fails to disclose determining a deadline for a packet that is moved from a first datastream to a second datastream.

Art Unit: 2419

Meggers discloses changing a deadline priority based on the difference of control parameters (column 13, lines 20-34) for all packets moved from a first queue to a second queue (column 14, lines 8-15).

Meggers teaches the benefit of a simpler control mechanism by using control packets to determine stream characteristics (column 5, lines 42-50). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Monta with the method of Meggers.

**With respect to claim 22**, Monta further discloses the tuning of HFC carriers (column 14, lines 1-10).

Monta fails to disclose determining a deadline for a packet moving from a first datastream to a second datastream.

Meggers discloses changing a deadline priority based on the difference of control parameters (column 13, lines 20-34) for all packets moved from a first queue to a second queue (column 14, lines 8-15).

Meggers teaches the benefit of a simpler control mechanism by using control packets to determine stream characteristics (column 5, lines 42-50). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Monta with the method of Meggers.

**With respect to claim 23**, Monta further discloses the tuning of HFC carriers (column 14, lines 1-10). Changing a PID in a cable system is known in the art to cause a change in RF channels.

9. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Monta in view of Heddes.

**With respect to claim 27**, Monta fails to disclose prioritizing data-streams and choosing a stream with the highest priority relative to other data-streams and transmitting a data-stream according to the priority.

Heddes, in an invention related to processing data through several pipes, discloses examining creating priorities (202, 204 , 206 of Figure 9) and then assigning a priority to packets from a data-stream or buffer (216, 220, 224 of Figure 10) before transmitting the packets (234, 238, 242 of Figure 11).

Heddes teaches the benefit of increased efficiency while processing data through multiple queues by examining the queues levels or capacity (column 7, lines 27-30). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Heddes with the method of Monta.

10. Claims 28-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Monta in view of Heddes and further in view of Meggers.

**With respect to claim 28**, Monta fails to disclose determining that a subset of the data streams includes a time indicator and creating a first priority as a function of the time indicator.

Meggers discloses that sub-streams are assigned an admission control packet (ACP) (column 10, lines 4-11) and this ACP will define control parameter T for assigning a type to the sub-stream (column 9, lines 50-55). The ACP will also define a control

Art Unit: 2419

parameter D for setting a delivery deadline (column 9, lines 44-49; viewed as equivalent to a waiting time priority). And that the arrival of real-time sub-streams with ACPs is considered in the processing of non real-time streams send to a second FIFO queue (column 14, lines 2-14).

Meggers teaches the benefit of a simpler control mechanism by using control packets to determine stream characteristics (column 5, lines 42-50). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Monta with the method of Meggers.

**With respect to claim 29**, Monta fails to disclose determining that a subset of the data streams includes a time indicator and creating a first priority as a function of the time indicator.

Meggers discloses that sub-streams are assigned an admission control packet (ACP) (column 10, lines 4-11) and this ACP will define control parameter T for assigning a type to the sub-stream (column 9, lines 50-55). The ACP will also define a control parameter D for setting a delivery deadline (column 9, lines 44-49; viewed as equivalent to a waiting time priority). And that the arrival of real-time sub-streams with ACPs is considered in the processing of non real-time streams send to a second FIFO queue (column 14, lines 2-14).

Meggers teaches the benefit of a simpler control mechanism by using control packets to determine stream characteristics (column 5, lines 42-50). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Monta with the method of Meggers.

**With respect to claim 30**, Monta fails to disclose a time indicator or a time stamp.

Meggers further discloses that the delivery deadline is converted from a timestamp for priority control (column 11, lines 59-67).

Meggers teaches the benefit of a simpler control mechanism by using control packets to determine stream characteristics (column 5, lines 42-50). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Monta with the method of Meggers.

**With respect to claim 31**, Monta fails to disclose determining that a subset of the data streams includes a time indicator and creating a first priority as a function of the time indicator.

Meggers discloses that sub-streams are assigned an admission control packet (ACP) (column 10, lines 4-11) and this ACP will define control parameter T for assigning a type to the sub-stream (column 9, lines 50-55). The ACP will also define a control parameter D for setting a delivery deadline (column 9, lines 44-49; viewed as equivalent to a waiting time priority). And that the arrival of real-time sub-streams with ACPs is considered in the processing of non real-time streams send to a second FIFO queue (column 14, lines 2-14).

Meggers teaches the benefit of a simpler control mechanism by using control packets to determine stream characteristics (column 5, lines 42-50). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Monta with the method of Meggers.

Art Unit: 2419

**With respect to claim 32**, Monta fails to disclose prioritizing data-streams and choosing a stream with the highest priority relative to other data-streams and transmitting a data-stream according to the priority.

Heddes, in an invention related to processing data through several pipes, discloses examining creating priorities (202, 204 , 206 of Figure 9) and then assigning a priority to packets from a data-stream or buffer (216, 220, 224 of Figure 10) before transmitting the packets (234, 238, 242 of Figure 11).

Heddes teaches the benefit of increased efficiency while processing data through multiple queues by examining the queues levels or capacity (column 7, lines 27-30). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Heddes with the method of Monta.

**With respect to claim 33**, Monta discloses detecting the subset of packets with a certain PID (82 of Figure 2).

Monta fails to disclose normalizing a parameter for identifying a second subset.

Heddes, in an invention related to processing data through several pipes, discloses examining creating normalized priorities (202, 204 , 206 of Figure 9) and then assigning a priority to packets from a data-stream or buffer (216, 220, 224 of Figure 10) before transmitting the packets (234, 238, 242 of Figure 11).

Heddes teaches the benefit of increased efficiency while processing data through multiple queues by examining the queues levels or capacity (column 7, lines 27-30). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Heddes with the method of Monta.



**With respect to claim 34**, Monta fails to disclose a quality of service constraints as parameter for scheduling packets.

Heddes, in an invention related to processing data through several pipes, discloses examining creating normalized priorities (202, 204 , 206 of Figure 9) and then assigning a priority to packets from a data-stream or buffer (216, 220, 224 of Figure 10), this priorities affect the bandwidth amount for a data pipe and would be recognized as a quality of service constraint by one of ordinary skill in the art because different levels of bandwidth affect the quality of the data stream.

Heddes teaches the benefit of increased efficiency while processing data through multiple queues by examining the queues levels or capacity (column 7, lines 27-30). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Heddes with the method of Monta.

**With respect to claim 35**, Monta fails to disclose deciding that a group of packets from the datastream is ready for transmission.

Heddes, in an invention related to processing data through several pipes, discloses examining queue levels (132, 136 of Figure 7) when moving data into pipes or buffers (7, 8, 9 of Figure 1A). Heddes further disclose that the output of the examination of the queue levels is used to assign packets to positions in the queues (212, 214, 218, 224 of Figure 10).

Heddes teaches the benefit of increased efficiency while processing data through multiple queues by examining the queues levels or capacity (column 7, lines 27-30).

Art Unit: 2419

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Heddes with the method of Monta.

**With respect to claim 36**, Monta fails to disclose prioritizing data-streams and choosing a stream with the highest priority relative to other data-streams and transmitting a data-stream according to the priority. Also Monta fails to disclose determining a buffer is not able to receive a set of data and determining a different buffer can receive a set of data.

Heddes, in an invention related to processing data through several pipes, discloses examining creating priorities (202, 204 , 206 of Figure 9) and then assigning a priority to packets from a data-stream or buffer (216, 220, 224 of Figure 10) before transmitting the packets (234, 238, 242 of Figure 11). Heddes also discloses examining queue levels (132, 136 of Figure 7) when moving data into pipes or buffers (7, 8, 9 of Figure 1A). Heddes further disclose that the output of the examination of the queue levels is used to assign packets to positions in the queues (212, 214, 218, 224 of Figure 10).

Heddes teaches the benefit of increased efficiency while processing data through multiple queues by examining the queues levels or capacity (column 7, lines 27-30). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Heddes with the method of Monta.

**With respect to claim 37**, Monta further discloses that when the packets are transmitted a counter is used (105 of Figure 4B) to check a threshold of primary PID

Art Unit: 2419

and secondary PID values (82 of Figure 2). When a change flag is detected the network node will change or reclassify the PID of the packets.

**With respect to claim 38**, Monta fails to disclose changing a first priority based on a modified priority difference.

Meggers discloses changing a deadline priority based on the difference of control parameters (column 13, lines 20-34).

Meggers teaches the benefit of a simpler control mechanism by using control packets to determine stream characteristics (column 5, lines 42-50). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to use the method of Monta with the method of Meggers.

### ***Response to Arguments***

11. Applicant's arguments, with respect to the rejection(s) of claim(s) 1-38 and 43 under Candelore and Meggers have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of DeMoney and Monta.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRIAN T. O'CONNOR whose telephone number is (571)270-1081. The examiner can normally be reached on 9:00AM-6:30PM, M-F.

Art Unit: 2419

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BTO/

Brian T. O'Connor  
December 9, 2008  
Patent Examiner